# Prescribed Fire Training Exchange (TREX) A Cooperative Burning and Collaborative Fire Training Program

Jeremy Bailey Fire Learning Network The Nature Conservancy

Bald Hills Controlled Burn, Redwood National Park (October 2013)



### The Nature Conservancy a leader in prescribed fire

- Lead burns on TNC lands
- Lead burns on lands of others
- Hire others to lead our burns
- Develop, and assist others to develop,
  - burn plans
  - fire management plans
  - strategic conservation plans
- Study and document fire's role
- Lead multi-party monitoring
- Collaborate with partners and neighbors
- Scale-up and make greater impacts



### In 2013:

**80,000 acres** of prescribed fire on TNC lands helped neighbors burn an additional **150,000 acres** 



Whiskeytown NRA 2013

Texas Coastal Plains, 2010

### Prescribed Fire Acres Burned by TNC 1988-2013



Klamath Mountains, 2013

# Outstanding support from partners and neighbors



The Nature Conservancy the Forest Service and Department of the Interior agencies have helped guide the Fire Learning Network and promote the collaborative process.



## **REPORTED BARRIERS** to prescribed fire

capacity weather resources permitting / legal concerns (Melvin 2012)

narrow burn windows regulations lack of adequate personnel environmental laws

(Quinn-Davidson, Varner 2011)

capacity liability / insurance air quality / smoke Weather (Melvin 2012)

## OTHER BARRIERS we hear and know about

- not enough qualified staff during appropriate burn windows
- lack of local community support
- local, state and federal regulatory and administrative procedures
- funding
- local partnerships not a priority

## **Cooperative Training Aligns** with the Cohesive Strategy

Loup River, Nebraska, April 2011



Loup River, Nebraska, one month earlier



Loup River, Nebraska, April 2011

Niobrara River, Nebraska, March 2013

Many landscapes that need fire lack local capacity to conduct burns efficiently.

Hosting 10-45 people for a training exchange can be daunting, but by sharing the host's duties among neighbors, significant amounts of prescribed fire can be completed.





## integration of stakeholders

## hands-on learning

# learning goes both ways

## preparation for complex fire environment

flexibility





















# **Building a Network**

Relationships made on the fireline build a more connected community, which leads to further opportunities for joint work.







Mixing people from numerous places and organizations brings diverse experiences and perspectives to the work at hand.

Those who come from afar are of course exposed to new landscapes and methods—but hosts and cadre also gain insights by discussing what is familiar to them with people from sometimes vastly different backgrounds, and fresh eyes.







- Forest Service
- Dept of the Interior
- state government
- local governments
- TNC
- other NGOs
- educational inst
- private
- international

# Organizational Affiliations of Training Exchange Participants



**Day 0:** The day before the participants arrive, the burn bosses and burn boss trainees arrive for initial scouting and planning.



# **Day 0:** The day before the participants arrive, the burn bosses and burn boss trainees arrive for initial scouting and planning.



# **Day 1:** Scientists, managers and land owners give presentations on local ecology and socio-economic impacts of fire.



#### Day 2: An afternoon field trip introduces local fire effects.



### Day 2: Briefings take place in the morning and evening.



### **Day 2:** Modules are formed.



### Day 2: Modules are formed and crews practice on the new equipment.



### Day 2: Modules are formed and crews practice on the new equipment.



### Day 2: Scout the burn units.



#### **Day 2:** Briefings take place in the morning and evening.



## Meanwhile: Manage other logistics, including meals and lodging.





#### ... and build a team.

### Day 2 or 3: Conduct a test fire.



## Day 2 or 3: Conduct a test fire. .


#### Day 2 or 3: Conduct a test fire. . .



#### Day 2 or 3:

#### ... and discuss the results.



#### Day 3 and 4: Begin burning larger more complex burn units.



# **Day 4 through 14:** Spend the remaining time of the assignment burning ever more complex and larger units



#### Meanwhile: Ensure time for documentation.



Know your agency guidelines and standards,

and work with your attorneys and grants specialists.

Use volunteer waivers, MOUs and cooperative agreements.



#### **TNC Documents that Support TREX**

- Memo from October 13, 2009 Conflict and Private Benefit Issues for Prescribed Burns on Private Lands
- Disclaimer for training documents
- Fire Checklist
- Guidance on TNC Participation in Fire Trainings
- Fire Training Release Agreement
- Permission and Waivers to Burn on Private Land
- Conflicts Guidance for Volunteer & Paid Work by Fire Staff
- Release of liability for prescribed burn observer
- Release of liability for volunteer wildland firefighter

### Integrate local resources, and provide required training.



## Include local land owners and neighbors.



Organize, lead and follow using the ICS.

Use Plans Section Chiefs and Training Officers.

Develop an Incident Action Plan Daily.



## Organize, lead and follow using the ICS.

- Scout and identify structures and critical areas for holding
- Create multiple photo-point locations (include brief description of species composition and structure)
- Document firing pattern and sequence
- Observe and document FL and ROS of backing, flanking and head fire
- Observe and document (photograph) smoke column and dispersion
- Collect and broadcast weather observations
- Collect and document first order fire effects
- Create fire behavior summary report
- Collect post-fire photo points
- Obtain track log of burned areas within unit
- Report to burn boss whether objectives were met

# Organize, lead and follow using the ICS.

1771

And a set of the set o

E SEC DEC DEC ESC

A DE CONTRACTOR O CONTRACTOR O

And And

Refrester Febrena CIDE

Bally Joces D

Di States

OCULURON CURLICUS

LINCS TION CARD

Ester

Karlan TUSTIN

ALEX TO

1855001000 Die see

Arde Jailla

Esp 1602017 1003015 HERITARY. ABETER!

# Promote good fire.

Train with key messages and practice with your firefighters.



# Promote good fire.

Train with key messages and practice with your firefighters.



# Promote good fire.

Invite the media and show them a good time.





Have a cache of equipment available for participants who do not have their own.



## Weather happens. Have contingency plans.







# **Aha! Moments**

- Use legal agreements
- Share resources
- Have an entire organization mobilized every day ready to burn
- Use T3 team or similar
- Emphasize learning
- Engage with media and VIPs
- Reach out to neighbors and local communities



Jeremy Bailey The Nature Conservancy jeremy\_bailey@tnc.org

The Fire Learning Network is supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

An equal opportunity provider.